2003 Urban Water Conservation Program

Grant Application Package

October 1, 2002
(10/18/02 Version)

2003 URBAN WATER CONSERVATION GRANT APPLICATION PACKAGE OCTOBER 1, 2002

The California Department of Water Resources (DWR) invites local agencies to submit an application for funding under the Urban Water Conservation Program.

APPLICATION DUE DATE:

3:00 p.m., December 3, 2002

Must be received, not postmarked, by this time and date.

SUBMIT APPLICATION TO: Submit 1 original, 8 photocopies, and 1 electronic copy, on 3.5-inch diskettes or CD-ROM (preferably in a PDF format, or in MS Word and/or Excel compatible format) to:

California Department of Water Resources,
Office of Water Use Efficiency
P.O. Box 942836
Sacramento, California 94236-0001
Attention: Marsha Prillwitz

or overnight carrier or hand deliver to:

California Department of Water Resources,
Office of Water Use Efficiency
1416 Ninth Street, Room 338,
Sacramento, California 95814
Attention: Marsha Prillwitz

QUESTIONS? NEED ASSISTANCE? CONTACT:

Marsha Prillwitz, (916) 651- 9674 or marshap@water.ca.gov
For an electronic copy of this Application Package, please go to this website:
www.water.ca.gov

Selection Criteria

Proposals will be reviewed and ranked according to the following criteria:

A. Technical/Scientific Merit, Feasibility, Monitoring and Assessment (Part A-4 through A-7): **30 points**

B. Qualifications of the Applicants and Cooperators (Part A-8): **5 points**

C. Innovation (Part A-9): **10 points**

D. Relevance and Importance (Part D-1): **10 points**

E. Outreach, Community Involvement and Acceptance (Part D-2): **10 points**

F. Benefits and Costs (Part E & F): **35 points**

No project with an average total score of less than 70 points will be funded.

How to Submit an Application

Please submit 1 original, 8 hard copies, and 1 electronic copy of the application on 3.5-inch diskettes or CD-ROM (preferably in a PDF format or in MS Word and/or Excel compatible format) by **3:00pm, DECEMBER 3, 2002** to:

California Department of Water Resources
Office of Water Use Efficiency
P.O. Box 942836
Sacramento, California 94236-0001
Attention: Marsha Prillwitz
Telephone: (916) 651-9674

For hand delivery or Overnight Carrier, deliver to:

California Department of Water Resources
Office of Water Use Efficiency
1416 Ninth Street, Room 338
Sacramento, California 95814
Attention: Marsha Prillwitz

The entire application shall be in 12-point font or larger with sections numbered according to the sections specified in this application package.

A-1 Urban Water Conservation Grant Application Cover Sheet

1. Applicant (Organization or affiliation): **City of Pomona**
2. Project Title: **Ultra Low-flow Toilet Distribution Program**

3. Person authorized to sign and submit proposal:

Name, Title	Henry Pepper, Utility Services Director
Mailing address	Box 660, Pomona, CA 91769
Telephone	(909) 620-3638
Fax	(909) 620-2030
E-mail	_____

4. Contact person (if different):

Name, Title	Vince Carstensen
Mailing address	Box 660, Pomona, CA 91769
Telephone	(909) 620-3628
Fax	(909) 620-2030
E-mail	Vinson_carstensen@ci.pomona.ca.us

5. Funds requested (dollar amount): $135,000
6. Applicant funds pledged (local cost share) (dollar amount): _____0____
7. Total project costs (dollar amount): $135,000

8. Estimated net water savings (acre-feet/year): 76.158
   Estimated total amount of water to be saved (acre-feet):
   Over 20 years (76.158 x 20) 1523.16

   Benefit/cost ratio of project for applicant: 2.95
   Estimated $/acre-feet of water to be saved: $456

9. Project life (month/year to month/year): 4/2004 – 4/2024
10. State Assembly District where the project is to be conducted: 60 & 61
11. State Senate District where the project is to be conducted: 29 & 32
12. Congressional District(s) where the project is to be conducted: 28 & 41
13. County where the project is to be conducted: Los Angeles
14. Do the actions in this application involve physical changes in land use, or potential future changes in land use?
    (a) Yes _____
    (if yes, complete the land use check list at http://www.calfed.water.ca.gov/adobe_pdf/Questionnaires_EC_Permits_LandUse.pdf and submit it with the proposal

(b) No _____X_____

A-2 Application Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the application;

The individual signing the form is authorized to submit the application on behalf of the applicant;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the application on behalf of the applicant; and

The applicant will comply with all terms and conditions identified in this Application Package if selected for funding.

_____	Henry Pepper, Utility Services Director	_____
Signature	Name and title	Date

A-3 Application Checklist

Complete this checklist to confirm all sections of this application package have been completed.

Part A: Project Description, Organizational, Financial and Legal Information

___x____A-1 Urban Water Conservation Grant Application Cover Sheet
___x____A-2 Application Signature Page
___x____A-3 Application Checklist
___x____A-4 Description of project
___na __A-5 Maps
___x____A-6 Statement of work, schedule
___x____A-7 Monitoring and evaluation
___x____A-8 Qualification of applicant and cooperators
___x ___A-9 Innovation
___x____A-10 Agency authority
___x____A-11 Operation and maintenance (O&M)

Part B: Engineering and Hydrologic Feasibility (construction projects only)

__na____B-1 Certification statement
__na____B-2 Project reports and previous studies
__na____B-3 Preliminary project plans and specifications
__na____B-4 Construction inspection plan

Part C: Plan for Environmental Documentation and Permitting

___na___C-1 CEQA/NEPA
___na___C-2 Permits, easements, licenses, acquisitions, and certifications
___na___C-3 Local land use plans
___na___C-4 Applicable legal requirements

Part D: Need for Project and Community Involvement

___x____D-1 Need for project
___x____D-2 Outreach, community involvement, support, opposition

Part E: Water Use Efficiency Improvements and Other Benefits

___x____E-1 Water use efficiency improvements
___x____E-2 Other project benefits

Part F: Economic Justification, Benefits to Costs Analysis

___x___F-1 Net water savings
___x____F-2 Project budget and budget justification
___x____F-3 Economic efficiency

Appendix: Benefit/Cost Analysis Tables

___x____Tables 1; 2; 3; 4a, 4b, 4c, 4d; and 5

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City of Pomona
Ultra Low-flow Toilet Distribution Program

A-4 Project Description

Per the City of Pomona's Housing Element of the General Plan, as of January 1, 1998, there were 39,287 dwelling units in Pomona, including single family, multi-family, and mobile home units. Nearly 65% of Pomona's housing stock was built before 1970 while less than 3% was constructed during the 1990's. Among the I-10 corridor cities with populations over 100,000, Pomona has the lowest proportion of newer units—those <10 years old-- and the second highest proportion of older units—those > 30 years old. The educational attainment of Pomona residents also affects the type of employment they are able to secure, their income, and ultimately the funds available to pay for housing. Pomona residents tend to have lower incomes than do the households of the surrounding Pomona area. With the comparatively low household incomes, many Pomona residents face a financial challenge in locating and maintaining affordable housing.

Based on the information above, the need exists in Pomona for replacement of old toilets for a large percentage of the dwelling units in the City. The city's last effort of this type was in March 1998, when approximately 1,000 low flow toilets were distributed to residents. The City wishes to increase its water conservation efforts in this area. Through the combination of City funds and a rebate program from the Metropolitan Water District (MWD), the City is also planning a distribution of 500 low flow toilets to residents in the spring 2003.

The "project" for which funding is being requested from the Urban Water Conservation Grant is to purchase and conduct a distribution event for 1,000 ultra low-flow toilets to residents in the City during the spring of 2004. The City's intentions are to do such events on a more regular basis until such a time it is evident the City's housing stock is brought up to date with these water conservation items.

A-5 Maps

Distribution of toilets will be citywide.

A-6 Statement of Work, Schedule

During the spring of 2004, the city will conduct a one day ultra low-flow toilet distribution for residents in the city.

Tasks:

1. Purchase of low-flow toilets.
   Starting date – January 2004
   Ending date - February 2004
2. Distribution of toilets.
   Starting date – March 2004
   Ending date - April 2004

A-7 Monitoring and Evaluation

Proof of toilet installation will be required of residents. Old toilets will be collected in exchange for the new toilets. These old toilets will be taken to a recycling facility for disposal. Follow-up will be done with residents to insure installation of the new toilets is done and the program is successful.

A-8 Qualifications of the Applicant and Cooperators

Mr. Vince Carstensen will serve as manager for this project. He has worked 18 years in the municipal government, with experience managing solid waste and recycling programs.

A-9 Innovation

This is a replacement program. No innovative technologies are anticipated.

A-10 Agency Authority

1. A draft resolution is attached. This is being taken to the City Council for approval at the meeting of December 16, 2002.
2. The City Pomona is an incorporated general law City.
3. No election is required.
4. No other agencies are involved.
5. There is no litigation pending.

A-11 Operations and Maintenance

Not applicable.

PART C – Plan for Completion of Environmental Documentation and Permitting Requirements

Because there is no discretionary action for this project, it is not subject to any CEQA or NEPA requirements.

C-1 California Environmental Quality Act and National Environmental Policy Act.

Not applicable.

C-2 Permits, Easements, Licenses, Acquisitions, and Certifications

Not applicable.

C-3 Local Land Use Plans

Not applicable.

C-4 Applicable Legal Requirements

Not applicable.

PART D – Need for Project and Community Involvement

D-1 Need for the Project

In accordance with the City of Pomona's Urban Water Management Plan, December, 2000, the replacement of toilet with ultra low-flow (ULF) fixtures is part of the City's water management policy. With nearly 65% of Pomona's housing stock built before 1970, the need exists for replacement of existing toilets in the City.

A conventional toilet uses at least 5 gallons per flush, while an ultra low-flow toilet, required in California since 1983, uses 1.6 gallons per flush. State law, Assembly Bill 2355, requires ULF in all new construction since January 1, 1992.

The replacement with ultra low-flow toilets has a positive benefit to the environment. Less water will be used for domestic toilet flushing. This will reduce demand on the water supply and will delay the need for sewage treatment facility expansion. If such replacements are not made, the demand for water and water treatment facilities is increased.

D-2 Outreach, Community Involvement, Support, Opposition

The City anticipates using a community based organization (CBO) to assist at the toilet distribution event. Such opportunities provide a fund raising opportunity for such organizations, and serve to generate goodwill throughout the community.

PART E – Water Use Efficiency Improvements and Other Benefits

E-1 Water Use Efficiency Improvements

The use of ultra low-flow toilets will result in a cost savings to residents, and a more efficient use of the City's water resources. Based on the following assumptions, certain water and cost savings are anticipated:

E-2 Other Project Benefits

None identified.

PART F – Economic Justification: Benefits to Costs

F-1 Net Water Savings

Net water savings are based on the following assumptions and analysis:

Typical old toilet water usage: 5 gal./flush
New toilet water usage: 1.6 gal/flush
Savings: 3.4 gals./flush

Typical family of 4 @ 20 flushes per day = 68 gals. Saved / day (3.4 x 20)
365 days/year = 24,820 gals. Saved / year

1000 toilets distributed = 24,820,000 gals. Saved / year

Gallons saved / year divided by 325,900 gallons per acre ft. = 76.158 ac. Ft. saved / year

F-2 Project Budget and Budget Justification

The following budget is proposed:

Purchase of 1,000 ultra low-flow toilets at $120 each = $120,000
Consultant/ advertising / use of community based organization to assist at distribution event: = 15,000

Total budget $135,000

F-3 Economic Efficiency

The City currently bills for water usage at the rate of $.303 per hundred cubic feet (HCF), with a minimum use charge of 10 HCF bi-monthly. Based on the assumptions made above, the average household could save approximately $75 /

year in water costs. (24,820 gals. Saved / year divided by 100 HCF = 248.20 HCF saved / year multiplied by $.303 per HCF = $75.20 water charges saved / year.)

These are direct customer benefits from the new ultra low-flow toilets.

The replacement with ultra low-flow toilets also has a positive benefit to the environment. Less water will be used for domestic toilet flushing. This will reduce demand on the water supply and will delay the need for sewage treatment facility expansion. If such replacements are not made, the demand for water and water treatment facilities is increased.

Applicant:
City of Pomona

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Table 1: Capital Costs

	Capital Cost Category *(a)*	Cost *(b)*	Contingency Percent *(c)*	Contingency $ *(d) (bxc)*	Subtotal *(e) (b+d)*
(a)	Land Purchase/Easement			0	0
(b)	Planning/Design/Engineering			0	0
(c)	Materials/Installation	120,000		0	120,000
(d)	Structures			0	0
(e)	Equipment Purchases/Rentals			0	0
(f)	Environmental Mitigation/Enhancement			0	0
(g)	Construction/Administration/Overhead	15,000		0	15,000
(h)	Project Legal/License Fees			0	0
(i)	Other			0	0
(j)	Total (1) (a + ... + i)				135,000
(k)	Capital Recovery Factor: Use Table 6				0.0872
(l)	Annual Capital Costs (j x k)				11,772

(1) Costs must match Project Budget prepared in Section F-2.

Applicant:
City of Pomona

Table 2: Annual Operations and Maintenance Costs

Administration *(a)*	Operations *(b)*	Maintenance *(c)*	Other *(d)*	Total *(e)*
				0

Table 3: Total Annual Costs

Annual Capital Costs (1) *(a)*	Annual O&M Costs (2) *(b)*	Total Annual Costs *(c) (a+b)*
11,772	0	11,772

(1) From Table 1, line (l)
(2) From Table 2, column *(e)*

Applicant: **City of Pomona**

Table 4: Water Supply Benefits
(2002 Dollars)

Net water savings (acre-feet/year) _____ 76.158

4a. Avoided Costs of Current Supply Sources

Sources of Supply *(a)*	Cost of Water ($/AF) *(b)*	Annual Displaced Water Supply (AF) *(c)*	Annual Avoided Costs ($) *(d) (b x c)*
Metropolitan Water Dist.	456	76.158	34728.048
			0
			0
			0
			0
Total			**34728.048**

4b. Alternative Costs of Future Supply Sources

Future Supply Sources *(a)*	Total Capital Costs ($) *(b)*	Capital Recovery Factor (1) *(c)*	Annual Capital Costs ($) *(d) (bxc)*	Annual O&M Costs ($) *(e)*	Total Annual Costs ($) *(f) (d+e)*
			0		0
			0		0
			0		0
			0		0
			0		0
Total					**0**

(1) Use number from Capital Recovery Factor Table 6

4c. Water Supplier Revenue (Vendability)

Parties Purchasing Project Supplies *(a)*	Amount of Water to be Sold (AF) *(b)*	Selling Price ($/AF) *(c)*	Expected Frequency of Sales (1) (%) *(d)*	Expected Selling Price ($/AF) *(e) (cxd)*	"Option" Fee (2) ($/AF) *(f)*	Total Selling Price ($/AF) *(g) (e+f)*	Annual Expected Water Sale Revenue ($) *(h) (b x g)*
				0		0	0
				0		0	0
				0		0	0
				0		0	0
				0		0	0
Total							**0**

(1) During the analysis period, what percentage of years are water sales expected to occur?
For example, if water will only be sold half of the years, enter 50% (0.5).

(2) "Option" fees are paid by a contracting agency to a selling agency to maintain the right of the contracting agency to buy water whenever needed. Although the water may not be purchased every year, the fee is usually paid every year.

Table 4d. Total Water Supply Benefits

(a) **Annual Avoided Costs of Current Supply Sources from 4a, column *(d)***	34,728
(b) **Annual Avoided Costs of Alternative Future Supply Sources from 4b, column *(f)***	0
(c) **Annual Expected Water Sale Revenue from 4c, column *(h)***	0
(d) **Total Net Annual Water Supply Benefit ($)** (a+b+c)	34,728

Applicant: **City of Pomona**

Table 5: Benefit/Cost Ratio

Project Benefits ($)(1)	34,728
Project Costs ($)(2)	11,772
Benefit/Cost Ratio	2.95

(1) From Table 4d, row (d): Total Annual Water Supply Benefits
(2) From Table 3. column *(c)* : Total Annual Costs

Table 6: Capital Recovery Table

Life of Project (in years)	Capital Recovery Factor
7	0.1791
8	0.1610
9	0.1470
10	0.1359
11	0.1268
12	0.1193
13	0.1130
14	0.1076
15	0.1030
16	0.0990
17	0.0954
18	0.0924
19	0.0896
20	0.0872
21	0.0850
22	0.0830
23	0.0813
24	0.0797
25	0.0782
26	0.0769
27	0.0757
28	0.0746
29	0.0736
30	0.0726
31	0.0718
32	0.0710
33	0.0703
34	0.0696
35	0.0690
36	0.0684
37	0.0679
38	0.0674
39	0.0669
40	0.0665
41	0.0661
42	0.0657
43	0.0653
44	0.0650
45	0.0647
46	0.0644
47	0.0641
48	0.0639
49	0.0637
50	0.0634